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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,897	12/29/2005	Klaus Peter May	DE 030232	6918
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EXAMINER				
VU, PHU ANH TRAN				
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4148				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,897

Applicant(s)

MAY ET AL.

Examiner

PHY ANH VU

Art Unit

4148

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 5/9/2007.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The instant application having Application No. 10/562,897 filed on 12/29/2005 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Priority

3. As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on foreign application (EPO) 03101971.4 filed on July 02, 2003.

Drawings

4. The drawing is objected to due to the lack of descriptive labels. Examiner hereby request that this be corrected.

Information Disclosure Statement

5. The information disclosure statement (IDS) submitted on 5/9/2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

6. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first and second paragraphs of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim recites a "quality measure", but does not clearly describe as to what the "quality measure" is based on. This leaves the claim ambiguous as to what a "quality measure" actually embodies which would prevent a person having ordinary skill in the art from making and using the invention as disclosed.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Lines 5-6, the claim recites "in which the sequence of phoneme groups thus obtained described the searched security code". Examiner do not understand what the applicant is intended to claim here.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites “a method of entering a security code into a data-processing apparatus, the method comprising the steps of:

- a. recording the audio data which are being produced when a sequence of phonemes is spoken by a user
- b. deriving a security code, based on the sequence of phonemes, from the recorded audio data”

The claim fails to place the invention squarely within one statutory class of invention. By recording the audio data, and deriving a security code based on the sequence of the inputted audio data, then entering that security code into a data-processing apparatus. These steps are viewed as software modules, which are not realizing any function producing a tangible and concrete result. The claim lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 U.S.C. 101. It is clearly not a series of steps or acts to be a process nor is it a combination of chemical compounds to be a composition of matter. As such, it fails to fall within a statutory category. It is at best, function descriptive material *per se*.

Claims 1-5, and 7 are rejected under 35 U.S.C. 101 as non-statutory for at least the reason stated above. **Claims 1-5, and 7** are depended on claim 1; however, they do not add any feature or subject matter that would solve any of the non-statutory deficiencies of claim 1.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by **WIPO Publication (WO 01/15369 A1, hereinafter Mark)**.

Regarding claim 1, Mark discloses a method of entering a security code (*Page 6, lines 18-21; wherein user enters the pass phrase*) into a data-processing apparatus, the method comprising the steps of:

a. recording the audio data which are being produced when a sequence of phonemes is spoken by a user (*Page 4, lines 13-21; Page 6, lines 18-21, wherein the*

user's input utterance is examined for its phonetic content, which implies that the audio data inputs by user has been recorded);

b. deriving a security code, based on the sequence of phonemes, from the recorded audio data (Page 2, lines 29-31, Page 5, lines 16-17, 23-21; *illustrate utterance of spoken pass-phrase and generate code sequences used to identify the user*).

Regarding claim 2, Mark also discloses a method as claimed in claim 1, characterized in that the security code represents a cryptographic key for secured communication in a network (Page 6, lines 28-33; Page 7, lines 1-2, *wherein the string of phonemes which represents the user's voice pattern is encrypted to produce an identification value that the destination uses to authenticate the user*).

Regarding claim 3, Mark also discloses a method as claimed in claim 1, characterized in that the audio data are subdivided into an estimated sequence of phonemes (Page 6, lines 18-21; *wherein the spoken pass phrase will broken down into syllables and assign values to the phonemes*), and these estimated phonemes are assigned to a group of phonemes from a predetermined classification of phoneme groups, in which the sequence of phoneme groups thus obtained describes the searched security code (Page 3, lines 5-7, line 4, lines 24-25 and Fig ;*wherein a list of predetermined phoneme IDs that are used to classify the phonemes inputs by user*) .

Regarding claim 4, Mark also discloses a method as claimed in claim 3, characterized in that a quality measure is computed about the security of assignment of the audio data to the groups of phonemes (*Page 6, lines 1-8; wherein the system makes sure sufficient phonemes can be generated from the pass phrase inputs by user, if the pass phrase results in insufficient phonemes, the system will prompt user to input another pass phrase*).

Regarding claim 5, Mark also discloses a method as claimed in claim 1, characterized in that biometric characteristics in the audio data are used for authentication of a user (*Page 2, lines 12—13,15-16; Page 4, lines 4-; wherein the inputted user's voice pattern is used as biometric for authentication*) .

Regarding claim 6, Mark also discloses a data-processing unit requiring the entry of a security code (*Page 3, lines 15-20, wherein user seeking access needs to have knowledge of a code or password*) for performing its function, the data-processing unit comprising:

- a. a speech-recording unit for recording the audio data that are being produced when a user (1) speaks a sequence of phonemes (*Page 6, lines 18-19, i.e microphone*);
- b. a speech analysis unit, coupled to the speech recording unit, for deriving a security code from the recorded audio data on the basis of the sequence of phonemes

(Fig. 2; Page 4, lines 13-15, 17-19; wherein the system examines the recorded audio data for phonemes and derives values based on these phonemes).

Regarding claim 7, Mark also discloses a data-processing unit (2) requiring the entry of a security code (Page 3, lines 15-20; wherein user seeking access needs to have knowledge of a code or password) for performing its function, the data-processing unit comprising:

a. a speech-recording unit for recording the audio data that are being produced when a user (1) speaks a sequence of phonemes (Page 6, lines 18-19, i.e microphone);

b. a speech analysis unit coupled to the speech recording unit for deriving a security code from the recorded audio data on the basis of the sequence of phonemes, characterized in that it is adapted to perform a method as claimed in claim 1 (Fig. 2; Page 4, lines 13-15, 17-19, wherein the system examines the recorded audio data for phonemes and derives values based on these phonemes).

Claim Rejections - 35 USC § 103

10. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mark, and further in view of Shigeeda (US 6,212,499 B1).

Regarding claim 8, Mark also discloses a data-processing unit as claimed in claim 6, when recorded audio data cannot be used for deriving a security code (Page 6,

lines 1-8, wherein when the system can not yield sufficient resilient phonemes from the inputted data, it will let the user know to select a different pass phrase to input. Once the sufficient result is determined, the system will notify the user that the chosen pass-phrase is acceptable for use as an identifier in an authentication).

Mark does not disclose the data-processing unit is adapted to indicate to the user via a display. However, Shigeeda discloses the data-processing unit that has a data display unit (*Fig. 1, element 107, col. 3, lines 45-56, col 7, lines 17-19*).

One of ordinary skill in the art would have been motivated to incorporate the display unit feature as shows in Shigeeda into the system of Mark at the time the invention was made because it permits a visual output to be generated seamlessly in accordance with the technological advances.

Regarding claim 9, Mark also discloses a data-processing apparatus as claimed in claim 6, characterized in that it comprises a communication interface for wireless communication with a network (*Page 7, lines 28-31 & Page 8, lines 1-2, wherein the system can adjust to various communication channels such as cellular versus wireline*).

11. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mark, and further in view of Buchner et al (US 2002/0069063, hereinafter Buchner).

Regarding claim 10, Mark also discloses all the limitations of claim 10, except a data-processing apparatus as claimed in claim 6 is present in a sub-network coupled to the network via at least one wireless connection.

However, Buchner discloses a data-processing apparatus in a sub-network coupled to the network via at least one wireless connection (*Fig. 5. Paragraph 0046, illustrates speech unit can be connected to a wireless network*).

One of ordinary skill in the art would have been motivated to incorporate the wireless feature describes in Buchner into the system of Mark at the time the invention was made because it would allow user to remotely control different network devices with ease .

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHY ANH VU whose telephone number is (571)270-7317. The examiner can normally be reached on Mon-Thr 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on 571-272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PVU

/THOMAS K PHAM/

Supervisory Patent Examiner, Art Unit 4148